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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,188	03/19/2001	Jeffrey A. Levin	QCPA774C	2778

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

ZHENG, EVA Y

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 04/08/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,188

Applicant(s)

LEVIN ET AL.

Examiner

Eva Yi Zheng

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamoto (5,953,364).

A) Regarding claims 16 and 19, Yamamoto discloses a method of time-tracking a plurality of instances of a data value modulated onto a signal, the method comprising the steps of: (as shown in Fig. 2)

(a) demodulating (block 7, 8 and 9) each instance of the modulated signal to produce a set of possible data value representations;

(b) combining (block 11) the sets of possible data value representations;
and

(c) using the combined set to time-track at least one instance (block 14, 15 and 16).

B) Regarding claim 17 and 20, Yamamoto discloses the representations comprise energy values (block 4 in Fig. 1, frequency is directly related to energy).

C) Regarding claims 18 and 21, Yamamoto discloses the representations comprise Walsh codes (block 5 in Fig. 1).

3. Claims 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwakiri (5,889,815).

A) Regarding claims 16 and 19, Iwakiri discloses a method of time-tracking a plurality of instances of a data value modulated onto a signal, the method comprising the steps of: (as shown in Fig. 1)

(a) demodulating (block 106, 111 and 116) each instance of the modulated signal to produce a set of possible data value representations;

(b) combining (block 117) the sets of possible data value representations;
and

(c) using the combined set to time-track at least one instance (block 202 in Fig.2).

B) Regarding claims 17 and 20, Iwakiri discloses the representations comprise energy values (block 118 in Fig. 1; Col 6, L44-54).

C) Regarding claims 18 and 21, Iwakiri discloses the representations comprise Walsh codes (block 102, 104, 107, 109, 112 and 114 in Fig. 1).

4. Claims 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Komatsu (5,881,057).

A) Regarding claims 16 and 19, Komatsu discloses a method of time-tracking a plurality of instances of a data value modulated onto a signal, the method comprising the steps of: (as shown in Fig. 1)

(a) demodulating (block 14) each instance of the modulated signal to produce a set of possible data value representations;

- (b) combining (block 15) the sets of possible data value representations;
and
 - (c) using the combined set to time-track at least one instance (block 19, 20 and 21).
- B) Regarding claims 17 and 20, Komatsu discloses the representations comprise energy values (block 17).
- C) Regarding claims 18 and 21, Komatsu discloses the representations comprise Walsh codes (Fig. 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (AAPA).

A) Regarding claims 16 and 19, AAPA discloses a method of time-tracking a plurality of instances of a data value modulated onto a signal, the method comprising the steps of: (as shown in Fig. 3)

- (a) demodulating (block 100A-100N) each instance of the modulated signal to produce a set of possible data value representations;
- (b) combining (block 110) the sets of possible data value representations;
and

(c) using the combined set to time-track at least one instance (block 118).

By comparing the energy results of the early and late process, the accuracy of the current on-time estimate can be determined according well-known principles of communication. (P 5, L6-8) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to realize that this is a well-known and accurate system for time tracking.

B) Regarding claims 17 and 20, AAPA discloses the representations comprise energy values (block 106; P 4, L20-27).

C) Regarding claims 18 and 21, AAPA discloses the representations comprise Walsh codes (P 5, L19-22).

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 16-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of patent No. US 6,229,839 B1. Although the conflicting claims are not

identical, they are not patentably distinct from each other because the broader application claims would have been obvious in view of narrow issued claims (see *In re Emert*, 124 F. 3d 1458, 44 USPQ2d 1149).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Yi Zheng whose telephone number is 703-305-8699. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-879-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Eva Yi Zheng
Examiner
Art Unit 2634

March 29, 2004

A handwritten signature in cursive script, appearing to read "Shuwang Liu".

SHUWANG LIU
PRIMARY EXAMINER